

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A hypotube comprising:
a tubular shaft comprising a tubular wall defining a lumen and a main section
connected to a distal section,
the distal section comprising a first section connected to a second section, the first
section being connected to the main section and disposed between the main section and the
second section,
the first section comprising at least one slit extending through the tubular wall, the at
least one slit extending at least partially and circumferentially around the tubular wall,
the second section comprising an elongated, solid stinger ~~formed by a portion of the~~
~~tubular wall~~,
the at least one slit being disposed in close proximity to the stinger.
2. (Withdrawn) The hypotube of claim 1 wherein the at least one slit of the first
section is further characterized as being a spiral cut extending substantially along the first
section.
3. (Withdrawn) The hypotube of claim 2 wherein the slit of the first section is further
characterized as being a spiral cut extending substantially from the proximal end to the distal
end of the first section.
4. (Withdrawn) The hypotube of claim 3 wherein the spiral cut has a constant pitch.
5. (Withdrawn) The hypotube of claim 4 wherein the spiral cut has a variable pitch.
6. (Withdrawn) The hypotube of claim 1 wherein the first section comprises a
proximal end integrally connected to the main section and a distal end integrally connected to
the second section, the slit of the first section is further characterized as being a spiral cut
extending substantially from the proximal end to the distal end of the first section

7. (Withdrawn) The hypotube of claim 6 wherein the spiral cut has a constant pitch.
8. (Withdrawn) The hypotube of claim 6 wherein the spiral cut has a variable pitch.
9. (Withdrawn) The hypotube of claim 1 wherein the second section comprises at least one slit for increasing flexibility of the second section.
10. (Withdrawn) The hypotube of claim 1 wherein the distal section further comprises a middle section disposed between and integrally connected to the first and second sections, the middle section being less flexible than the second section but more flexible than the first section.
11. (Withdrawn) The hypotube of claim 10 wherein the middle section comprises a plurality of slits in the tubular wall thereof.
12. (Withdrawn) The hypotube of claim 11 wherein the tubular wall of the middle section is at least partially collapsed.
13. (Withdrawn) The hypotube of claim 1 wherein the distal section further comprises a middle section disposed between and integrally connected to the first and second sections, the middle section comprising a plurality of perforations in the tubular wall thereof to make the middle section less flexible than the second section but more flexible than the first section.
14. (Withdrawn) The hypotube of claim 13 wherein the tubular wall of the middle section is at least partially collapsed.
15. (Withdrawn) The hypotube of claim 10 wherein the middle section further comprises at least one slit through the tubular wall.

16. (Withdrawn) The hypotube of claim 14 wherein the tubular wall of the middle section is at least partially collapsed between the slit and the second section.

17. (Original) The hypotube of claim 1 wherein the stinger is tapered.

18. (Withdrawn) The hypotube of claim 1 wherein the second section comprises a plurality of stingers.

19. (Previously Presented) The hypotube of claim 1 wherein the second section comprises an elongated axial cut out through the tubular wall and the stinger is formed from the remaining portion of the tubular wall.

20. (Currently Amended) A catheter apparatus comprising:
the a hypotube comprising a tubular shaft comprising a tubular wall defining a lumen and a main section integrally connected to a distal section,
the distal section comprising a first section integrally connected to a second section, the first section being integrally connected to the main section and disposed between the main section and the second section,
the first section comprising at least one slit extending through the tubular wall, the at least one slit extending at least partially and circumferentially around the tubular wall,
the second section comprising an elongated, solid stinger formed by a portion of the tubular wall,
the at least one slit being disposed in close proximity to the stinger.

21. (Previously Presented) The catheter apparatus of claim 20 wherein the second section comprises an elongated axially extending cut out through the tubular wall and the stinger is formed from a remaining portion of the tubular wall.

22. (Original) The catheter apparatus of claim 20 wherein the catheter apparatus is a stent delivery system.

23. (Withdrawn) The catheter apparatus of claim 22 wherein a distal end of the catheter is connected to a balloon.

24. (Withdrawn) The catheter apparatus of claim 22 wherein the catheter apparatus is a stent delivery system having a stent mounted to a balloon.

25. (Withdrawn) The catheter apparatus of claim 20 wherein the at least one slit of the first section is further characterized as being a spiral cut extending substantially along the first section.

26. (Withdrawn) The catheter apparatus of claim 25 wherein the spiral cut has a constant pitch.

27. (Withdrawn) The catheter apparatus of claim 25 wherein the spiral cut has a variable pitch.

28. (Withdrawn) The catheter apparatus of claim 20 wherein the first section comprises a proximal end integrally connected to the main section and a distal end integrally connected to the second section, the slit of the first section is further characterized as being a spiral cut extending substantially from the proximal end to the distal end of the first section.

29. (Withdrawn) The catheter apparatus of claim 28 wherein the spiral cut has a constant pitch.

30. (Withdrawn) The catheter apparatus of claim 28 wherein the spiral cut has a variable pitch.

31. (Withdrawn) The catheter apparatus of claim 20 wherein the second section comprises at least one slit for increasing flexibility of the second section.

32. (Withdrawn) The catheter apparatus of claim 20 wherein the distal section further comprises a middle section disposed between and integrally connected to the first and second sections, the middle section being less flexible than the second section but more flexible than the first section.

33. (Withdrawn) The catheter apparatus of claim 32 wherein the middle section comprises a plurality of slits extending at least partially through the tubular wall thereof.

34. (Withdrawn) The catheter apparatus of claim 32 wherein the tubular wall of the middle section is at least partially collapsed.

35. (Withdrawn - Currently Amended) The catheter apparatus of claim ~~18~~ 20 wherein the distal section further comprises a middle section disposed between and integrally connected to the first and second sections, the middle section comprising a plurality of perforations in the tubular wall thereof to make the middle section less flexible than the second section but more flexible than the first section.

36. (Withdrawn) The catheter apparatus of claim 35 wherein the tubular wall of the middle section is at least partially collapsed.

37. (Withdrawn) The catheter apparatus of claim 35 wherein the middle section further comprises at least one slit through the tubular wall.

38. (Withdrawn) The catheter apparatus of claim 37 wherein the tubular wall of the middle section is at least partially collapsed between the slit and the second section.

39.(Original) The catheter apparatus of claim 20 wherein the stinger is tapered.

40. (Withdrawn) The catheter apparatus of claim 20 wherein the second section comprises a plurality of stingers.

41-51. (Canceled).

52. (Currently Amended) A hypotube comprising:
a tubular shaft comprising a tubular wall defining a lumen and a main section connected to a distal section,
the distal section comprising at least one slit extending through the tubular wall, the at least one slit extending at least partially and circumferentially around the tubular wall,
the distal section further comprising an elongated cut-out along the tubular wall which forms an elongated, solid stinger,
the at least one slit being disposed in close proximity to the stinger.

53. (Withdrawn) The hypotube of claim 52 wherein the at least one slit is further characterized as being a spiral cut extending substantially along the distal section.

54. (Withdrawn) The hypotube of claim 53 wherein the spiral cut has a constant pitch.

55. (Withdrawn) The hypotube of claim 53 wherein the spiral cut has a variable pitch.

56. (Canceled).

57. (Original) The hypotube of claim 52 wherein the stinger is tapered.

58. (Withdrawn) The hypotube of claim 52 wherein the distal section comprises a plurality of stingers.

59-63. (Canceled).

64. (Currently Amended) A hypotube comprising:
a tubular shaft comprising a tubular wall defining a lumen and a main section connected to a distal section,
the distal section comprising at least one slit extending through the tubular wall, the at least one slit extending at least partially and circumferentially around the tubular wall,
the distal section further comprising a distal end connected to a solid stinger element, the at least one slit being disposed in close proximity to the stinger.
65. (Withdrawn) The hypotube of claim 64 wherein the at least one slit is further characterized as being a spiral cut extending substantially along the distal section.
66. (Withdrawn) The hypotube of claim 64 wherein the spiral cut has a constant pitch.
67. (Withdrawn) The hypotube of claim 64 wherein the spiral cut has a variable pitch.
68. (Canceled).
69. (Original) The hypotube of claim 64 wherein the stinger is tapered.
70. (Withdrawn) The hypotube of claim 64 wherein the distal end is connected to a plurality of stingers.
- 71-75. (Canceled).
76. (New) The hypotube of claim 64 wherein the stinger element is welded to the distal section distal end.
77. (New) The hypotube of claim 64 wherein the stinger element is formed by a portion of the tubular wall.